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Lucinid bivalves from Miocene hydrocarbon seep sites of eastern North Island, New Zealand, with comments on Miocene New Zealand seep faunas

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Three new fossil species of lucinids, *Meganodontia haunuiensis, Elliptiolucina neozelandica,* and *Lucinoma saetheri*, are described from lower to middle Miocene hydrocarbon seep carbonates from north and south of Hawke Bay, eastern North Island, New Zealand. Of these taxa *Meganodontia haunuiensis* is confined to seep sites south of Hawke Bay, while Elliptiolucina neozelandica comes only from the seep sites north of Hawke Bay. Using ecological information from modern bivalve species, we suggest the southern area seep sites formed in shallower waters than the northern sites. Among the lucinids, *Meganodontia haunuiensis* is one of the oldest records of the genus, and its distribution has shrunk from worldwide in the Miocene times to only around Taiwan today. *Elliptiolucina neozelandica* is the second oldest species in the genus. Since the Miocene the distribution of *Elliptiolucina* has narrowed but its habitat range has increased to both seeps and sandy environments, mainly around the Philippines.

Key words: Mollusca, Bivalvia, Lucinidae, hydrocarbon seep, Miocene, New Zealand.

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